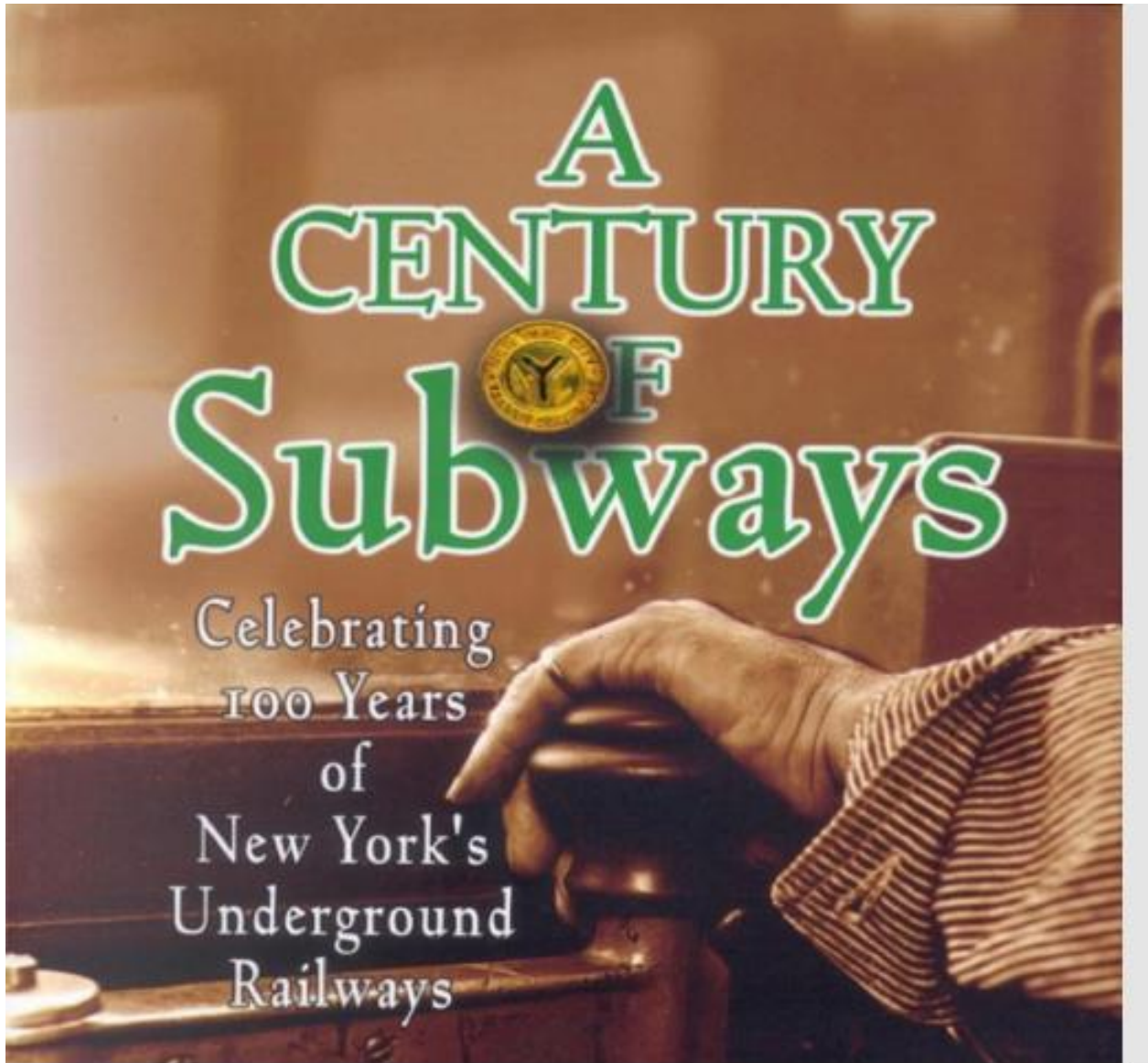


Extract from book A Century of Subways

A Century of Subways: Celebrating 100 Years of New York's Underground Railways 1st Edition
by Brian J. Cudahy 2009 ISBN-13: 978-0823222933



trified subway in the world—opened in **Budapest** in 1896, in the same year that cable-powered service was inaugurated in Glasgow. It was a 2.5-mile line that ran inland from the east bank of the Danube River through tunnels that were built immediately below the surface. Trains drew electric current from overhead trolley wires, and the service has long been known as the Millennium Line. This was not an early reference to the dawn of the twenty-first century 104 years in the future, but rather a commemoration of the fact that when the **Budapest** Subway's service was inaugurated in 1896, Hungry—kingdom, state, or nation—was a modest 1,000 years old.

Budapest's Millennium Subway of 1896 saw little in the way of system expansion until quite recently. Some new construction was begun in 1949, but work had to be suspended shortly afterward, and it was not until 1970 that **Budapest** inaugurated service on the first of two new **metro** lines and even added a modest northward expansion to the original 1896 line. All **Budapest** subways, new as well as old, operate on standard-gauge track, but the original line features a much narrower loading gauge than the newer lines, as well as a different form of electrification. Consequently, the 1896 route in **Budapest** is referred to today as a "small-profile" **metro** operation. Its current rolling stock is a fleet of twenty-three three-car articulated units built in Hungry between 1973 and 1987 by Ganz, while the two newer lines operate a fleet of 371 cars built by Mytischy of Moscow to standard designs once used in all Warsaw Pact countries.

The German capital city of **Berlin** boasts an extensive rapid-transit system. Its original line, some 8½ miles in length, began service in 1902 and incorporated both underground and elevated construction. Like New York—and like **Budapest**, too—the **Berlin** system operates on standard-gauge track but includes two separate networks, each with rolling stock of a unique width. One fleet includes 866 cars that are a trifle over 8½ feet wide, while the other network operates 516 cars that measure 7½ feet across. These latter may well be the narrowest subway cars currently in use in any major world **metro** system. Major portions of the **Berlin** Subway also utilize a form of electric current distribution that we shall see more of in Chapter 4—namely, a trackside third rail that trains contact on its underside with a spring-loaded third-rail